

**REMARKS**

This Amendment is filed under 35 U.S.C. 116 is filed in response to a FINAL Office Action dated June 11, 2008. All rejections and objections are respectfully traversed.

Claims 1 – 20 and 24 – 26 are pending in this case.

No new matter has been added.

**Request for Interview**

The Applicant respectfully requests a telephonic interview with the Examiner after the Examiner has had an opportunity to consider this Amendment, but before the issuance of the next Office Action. The Applicant may be reached at 617-951-2500.

**Double Patenting**

At paragraphs 6 and 7 of the Office Action, various claims were rejected under the judicially created doctrine of double patenting in view of U.S. Patent No. 7,269,696. The terminal disclaimer filed herewith is believed to satisfy this rejection.

**Claim Rejection – 35 USC §102**

At paragraphs 4 – 11 of the Office Action, claims 1 – 3, 6, 12 – 17, and 20, and 24 – 26 were rejected under 35 U.S.C. §102(e) as being anticipated by Becker-Szendy et al., U. S. Patent No. 7,243,089, issued on July 10, 2007 (hereinafter “Becker-Szendy”).

Applicant’s claimed invention, as set forth by independent claim 1, comprises in part:

1. A system comprising:  
a plurality of network resources adapted to process **received block-based protocol** data access requests; ***and***  
*one or more virtual servers each comprising a logical partitioning of the network resources to establish an instance of a multi-protocol*

*server configured to **service the block-based data access requests** by **converting the block-based protocol requests** to appropriate file system data requests.*

Becker-Szendy discloses a file based storage system which writes data to disk blocks. (See Becker-Szendy, Col. 7, Lines 14 – 16). Also, Becker-Szendy uses a number ID for his file names. (See Becker-Szendy, Col. 10, Lines 45 – 48).

In stark contrast to Becker-Szendy, Applicant claims a ***block-based*** storage system that services ***block-based protocol data access requests***. Further, Applicant claims converting ***block-based protocol data access*** requests into ***file system data requests*** for storing the data as files.

**First: Applicant claims processing Block-Based Protocol Data Access Requests, not the File Based access requests disclosed by Becker-Szendy**

Applicant notes that Applicant's Specification clearly states, at numerous locations, that the present invention services a block-based data access request. Specifically, Applicant's Specification states (emphasis added):

The network and storage resources are partitioned to establish an instance of a multi-protocol server that **is configured to service data access requests in response to the block-based protocols**. (See Applicant's Specification, Page 4, lines 10 – 12).

The clients 160 generally **utilize block-based access protocols**, such as the Small Computer Systems Interface (SCSI) protocol, **when accessing information** (in the form of blocks, disks or vdisks) over a SAN-based network. SCSI is a peripheral input/output (I/O) interface with a standard, device independent protocol that allows different peripheral devices, such

as disks 130, to attach to the storage appliance 100. In SCSI terminology, **clients 160 operating in a SAN environment are initiators that initiate requests and commands for data.** (See Applicant's Specification, Page 8, lines 8 – 14).

The initiators (hereinafter clients 160) may thus request the services of the target (hereinafter storage appliance 100) **by issuing iSCSI and FCP messages** over the network 165, 185 **to access information stored on the disks.** (See Applicant's Specification, Page 8, Lines 21 – 23).

In addition, the file system provides volume management capabilities for use in **block-based access to the stored information.** (See Applicant's Specification, Page 13, Lines 4 – 5).

Therefore, Applicant's Specification clearly discloses that Applicant's system services a **block-based** data access request.

In stark contrast to Applicant's system, Becker-Szendy discloses servicing a file system I/O request, which Becker-Szendy discloses throughout its patent. Specifically, Becker-Szendy states:

Application 215 makes a file system I/O system call to the kernel space 265 and the storage tank client 235 in the kernel space 265, including the buffer cache. (See Becker-Szendy, Col. 13, Lines 15 – 17).

To access data in the storage space 230 before it has been migrated to the storage tank system 300, applications 215 make their file system I/O calls into the kernel space 265. (See Becker-Szendy, Col. 13, Lines 28 – 30).

Applications 215 may still access a file after it has been migrated out of the local file system 210. Application 215 makes a file system I/O call to the kernel space 265. (See Becker-Szendy, Col. 14, Lines 38 – 40).

Therefore, Becker-Szendy discloses servicing a file I/O request and DOES NOT disclose servicing a block-based data access request as is claimed by Applicant.

Accordingly, Applicant respectfully submits that Becker-Szendy is legally insufficient to render the presently claimed invention unpatentable under 35 USC §102 because of the absence in Becker-Szendy of Applicant's claimed novel "...*server configured to service the block-based data access requests...*"

**Second: Becker-Szendy uses a Number ID for his file names**

Applicant respectfully submits that Applicant's system converts a **block-based protocol requests** to appropriate file system data requests while Becker-Szendy merely represents each object (i.e., directories or files) as object ID numbers.

Thus, Applicant respectfully submits that Becker-Szendy fails to teach or suggest Applicant's claimed novel *converting the block-based protocol requests to appropriate file system data requests.*

The Examiner, in his "Response to Arguments", citing Becker-Szendy, Col. 11, Lines 1 -11, states (emphasis added):

Becker-Szendy teaches of the system 205, which includes a virtual meta-data server 245 and the virtual object storage server 250 (i.e., Applicant's virtual servers), implementing the mapping (i.e., Applicant's converting) of the client data access request so that they can be understood by the local file system. (See Office Action, Page 19 and Becker-Szendy, Col. 11, Lines 1 – 11)

Applicant respectfully disagrees and submits that in contrast to Applicant's claim as highlighted above, Becker-Szendy associates an object ID number (OID) with each storage object (i.e., directories, files, etc). (See Becker-Szendy, Col. 10, Lines 45 – 48).

Specifically, at Col. 11, Lines 1 – 11, Becker-Szendy states:

storage tank objects (i.e. directories, files etc.) are identified by an object ID number (OID)...System 205 provides a mapping from file name to object ID number, and a reverse mapping... (See Becker-Szendy, Col. 11, Lines 1 – 11).

The ID NUMBERS disclosed at Col. 11, Lines 1 – 11 ARE NOT equivalent to Applicant's claimed **block-based protocol requests** as seems to be asserted by the Examiner. Instead, the ID numbers are merely arbitrary numbers that identify the file name or directory.

Accordingly, Applicant respectfully submits that Becker-Szendy is legally insufficient to render the presently claimed invention unpatentable under 35 USC §102 because of the absence in Becker-Szendy of Applicant's claimed novel “...*server configured to service the block-based data access requests*” AND “by *converting the block-based protocol requests* to appropriate file system data requests.”

### **Claim Rejection – 35 USC §103**

At paragraphs 12 – 14 of the Office Action, claims 4 – 5 and 18 – 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Becker-Szendy in view of Mane et al., U.S. Patent Publication No. 20050050107 (hereinafter “Mane”). Applicant respectfully notes that claims 4 – 5 and 18 – 19 are dependent claims that depend from

independent claims that are believed to be in condition for allowance. Accordingly, claims 4-5 and 18-19 are believed to be in condition for allowance.

At paragraphs 12 and 15 – 18 of the Office Action, claims 7 – 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Becker-Szendy in view of George et al., U.S. Patent No. 7,010,663, issued March 7, 2006 (hereinafter “George”). Applicant respectfully notes that claims 7 – 11 are dependent claims that depend from independent claims that are believed to be in condition for allowance. Accordingly, claims 7-11 are believed to be in condition for allowance.

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims.

Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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